

EFFECTS OF GEOGRAPHIC COST OF LIVING ADJUSTMENTS ON WELFARE BENEFITS

Robert A. Hoppe

U.S. Department of Agriculture
Economics, Statistics, and Cooperatives Service

Rural Development Research Report No. 16

EFFECTS OF GEOGRAPHIC COST OF LIVING ADJUSTMENTS ON WELFARE BENEFITS, by Robert A. Hoppe. Economic Development Division, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture. Rural Development Research Report No. 16.

ABSTRACT

Adjusting welfare benefits for geographic variations in the cost of living not only would help people in high-cost areas but also provide recipients in all areas with similar real benefits. However, there are technical problems and expenses involved in developing a cost of living index with adequate geographic detail. Simulations examined in this study indicate that providing adjusted rather than uniform benefits could slightly reduce total benefits paid. Cost of living adjustments would reduce benefits in southern and nonmetropolitan areas and increase benefits in metropolitan areas.

Keywords: Cost of living, Poverty, Rural poverty, Welfare programs.

PREFACE

The Urban Institute developed the data for this report from its Transfer Income Model (TRIM) for the Economic Development Division, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture. Glenda Sims and Linda Hatcher assisted in the report's preparation. Thomas A. Carlin, Thomas F. Davis, G. William Hoagland, Dick Michel, Paul Nelson, Jr., Shirley Ann Pryor, Larry Salathe, Peggy Sulvetta, and Richard F. Wertheimer all made useful suggestions. Related reports the reader may find useful are as follows:

Carlin, Thomas A., Gary Hendricks, and Faye F. Christian
Residential and Regional Distribution of Benefits Under the Allowance for Basic Living Expenses (ABLE) Welfare Reform Proposal. AER-374. U.S. Dept. Agr., Econ. Res. Serv., June 1977.

Shirley
onal and Residential Impacts of the Proposed Better Jobs and Income Program.
-69. U.S. Dept. Agr., Econ., Stat., Coop. Serv., Aug. 1979.

partment of Agriculture
ytical Support for Cost of Living Differentials in the Poverty Threshold.
Measure of Poverty, Tech. Pap. XV. Prepared by Econ. Res. Serv. for U.S. Dept. th, Educ., Welfare, Oct. 1976.

CONTENTS

	<u>Page</u>
Summary.....	iv
Introduction.....	1
Current Cost of Living Adjustments on Welfare Benefits.....	1
Arguments for Cost of Living Adjustments.....	2
Arguments Against Cost of Living Differentials.....	3
Constructing the Index.....	4
Delineating Areas.....	4
Possible Inequities.....	5
Administrating and Revising the Index.....	5
Political Problems.....	5
Methodology.....	6
The Model.....	6
Hypothetical Programs.....	7
Cost of Living Index.....	8
Results.....	11
Total Benefits and Eligibles.....	11
Distribution of Benefits by Residence and Region.....	11
Average Benefits.....	13
Benefits by Race and Sex.....	14
Benefits to the Elderly.....	15
Conclusions.....	15
Literature Cited.....	17

SUMMARY

Adjusting welfare benefits to reflect geographic variations in the cost of living would be more equitable than providing uniform benefits nationally, because the adjustments would give the same real purchasing power to similar families residing in areas with different living costs.

However, nonmetropolitan and southern poor people would favor uniform rather than adjusted benefits, if they act in their own self-interest. Uniform benefits would provide more real purchasing power to Southerners and nonmetropolitan people than benefits adjusted for the cost of living.

Implementing cost of living adjustments would be difficult. Developing a fair cost of living index to use in making the adjustments would be expensive and time-consuming. Constructing an index requires large amounts of data and would be complicated by variations in the availability and quality of goods from place to place.

EFFECTS OF GEOGRAPHIC COST OF LIVING ADJUSTMENTS ON WELFARE BENEFITS

Robert A. Hoppe ^{1/}

INTRODUCTION

Recent welfare reform proposals have included provisions to adjust benefit levels according to differences in an area's cost of living (10). ^{2/} Some welfare programs already have explicit cost of living adjustments. Adjusting Federal benefits according to cost of living variations may be more desirable than providing uniform benefits, if living costs vary geographically. These adjustments would provide larger benefits to compensate for higher living costs and could affect total benefits paid, the distribution of benefits among different groups of people, and the number of people in poverty.

This report discusses present geographic variations in Federal welfare benefits, considers the arguments for and against geographic cost of living adjustments, and examines the effects of potential cost of living adjustments. Such information is useful to citizens, policymakers, and welfare personnel in deciding whether cost of living adjustments should be implemented.

CURRENT COST OF LIVING ADJUSTMENTS ON WELFARE BENEFITS

Two poor people living in similar circumstances but different areas may receive substantially different welfare benefits under the prevailing system. The importance of cost of living adjustments in explaining the different levels of benefits varies from program to program.

Benefits from Aid to Families with Dependent Children (AFDC) differ in each State. For example, an eligible family consisting of one adult and three children with no income received \$60 each month in Mississippi and \$448 in New York in 1976 (12). Average per recipient payment in October 1977 ranged from \$14.56 in Mississippi to \$118.60 in New York (25). This variation exists because each State is allowed to set its own benefit levels and decide how much income a family of a given size can receive and still be eligible for AFDC (21). States can compensate for higher living costs by setting higher income limits and higher benefit payments.

^{1/} Robert A. Hoppe is an economist with the Economic Development Division, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture.

^{2/} Underscored numbers in parentheses refer to Literature Cited listed at the end of this report.

Work expenses, such as uniforms and travel, are deducted when calculating income for AFDC (21). These deductions would reflect higher expenses in States with higher living costs. However, the range in AFDC payments is much too large to be adequately explained by cost of living variations. 3/ States' benefits also vary because of differences in funding abilities and attitudes toward the poor (1, 26). 4/

The Supplemental Security Income (SSI) program provides uniform Federal benefits to all recipients in similar circumstances. States may supplement the basic Federal SSI benefits, so total SSI benefits vary among the States (21). State supplementation allows individual States to compensate for a high cost of living. However, States act independently of each other, and there is no coordinated effort to vary the State supplements according to cost of living variations.

Several provisions in Federal in-kind assistance programs result in benefits that vary to reflect cost of living differences. The Food Stamp program provides uniform benefits throughout the continental United States for a family of a given size with a given net income. Only in Alaska and Hawaii are higher Food Stamp benefits provided to compensate for higher living costs (21). The Food Stamp program also allows limited deductions for shelter and child care when calculating net income (24). These deductions would tend to be higher in areas with a high cost of living and result in more benefits.

Other Federal in-kind programs pay housing and medical bills, and they, too, have varying benefits due to local price differences. For instance, Medicaid benefits are, in effect, adjusted for price variations because medical service prices vary geographically (21). Federal Medicaid benefits may also vary because the program relies on State-Federal financing, with the Federal share dependent on State per capita income, and because of variations in the services covered by the States' regulations (21).

The present welfare system has no consistent, coordinated, or thorough program for adjusting benefits to reflect cost of living differences. The deductions allowed in calculating Food Stamp and AFDC incomes reflect some of the variations in local costs; however, variations in other family living costs are ignored. AFDC and SSI provide opportunities for States to raise benefits paid to the poor, although there is no guarantee that States will vary benefits to reflect the cost of living.

ARGUMENTS FOR COST OF LIVING ADJUSTMENTS

The principles of income adequacy and horizontal equity support cost of living differentials in welfare benefits. Ideally, a welfare program should provide a minimum adequate level of income for those who do not receive sufficient income from work or other sources (1). What constitutes an adequate income level may not be constant throughout the United States. A given dollar amount of welfare benefits adequate to maintain a family in one area may not be adequate in another area with a higher cost of

living. Adjusting benefits to reflect geographic variations would help provide an adequate income to welfare families in high-cost areas.

A welfare program should provide horizontal equity. Horizontal equity means equal treatment of people in similar circumstances (1). Uniform benefits seemingly would provide horizontal equity in dollar terms. However, if the cost of living varies substantially, the purchasing power of a given amount of money is higher in areas with a lower cost of living (10). Welfare benefit adjustments to reflect cost of living differences would equalize the real purchasing power of similar families nationwide.

Uniform benefits may also provide an incentive to migrate from high-cost areas with low real benefits to low-cost areas with high real benefits. Providing adjusted benefits allows all recipients to receive a minimum level of real benefits without having to move (6). However, if low-cost areas have adequate job opportunities, the incentive to migrate to these areas could be viewed favorably (10). These arguments cannot be validated because of a lack of studies on migration in response to differences in welfare benefits (6).

There must be an index to compare the cost of attaining a given level of satisfaction or standard of living for a given individual in different areas in order to adjust benefits. The index must be defined in terms of a given individual to be practical because there is no way to compare satisfaction received by different people (11). 5/ Such an index is technically feasible, even though one does not presently exist. An index, for instance, could be devised to measure geographic price differentials (10). This approach is used for the Florida Price Level Index, which compares the cost of the Bureau of Labor Statistics' (BLS) Orlando market basket in Florida's 67 counties. 6/

Another approach involves preparing a different market basket for each area to reflect local differences in climate and the quality and availability of goods. 7/ Each area's market basket cost is then calculated from local prices, and the index compares the cost of the market baskets for the different areas. The BLS uses this approach in preparing its family budgets and circumvents the problem of measuring satisfaction derived from the different baskets by assuming that an individual is equally satisfied with each basket (14).

ARGUMENTS AGAINST COST OF LIVING DIFFERENTIALS 8/

There are strong arguments against making cost of living adjustments to welfare benefits. Constructing, administering, and revising the necessary cost of living index could be difficult and expensive. Using the index to adjust benefits may cause inequities.

5/ Varying tastes may make a single, adequate cost of living index impossible. For instance, New York prices may seem high given Wichita tastes, while Wichita may seem high given New York tastes. It is impossible to say which city is massive until New York or Wichita tastes are specified. Deciding whose tastes are represented in an index used to adjust welfare benefits could be difficult.

6/ The Florida Price Level Index is used to adjust State funds distributed to districts. Unless the adjustment is made, schools in low-cost areas benefit at the expense of schools in high-price areas (3).

7/ Variations in need can result from climatic differences, such as when people in International Falls, Minn., buy more heating fuel, snow tires, and warm clothing than people in Key West, Fla.

8/ For a more thorough discussion of reasons against cost of living adjustments (10).

Constructing the Index

Many of the goods and services urban people take for granted are not available in rural areas. Public transportation is virtually nonexistent in rural areas. There are no apartments to rent in many rural areas, and some areas do not have a physician. The quality of goods and services also varies. Housing admittedly may be cheaper in rural areas, but it is also more likely to lack adequate plumbing and to be older and more crowded than urban housing (8). Taxes may be lower, but public services, such as libraries, education, and fire protection, are likely to be inferior.

Adjusting the various market baskets to compensate for the variation in the availability and quality of goods and services is difficult. For example, what should be placed in a rural area's market basket as an equivalent to urban public transportation (10)? Anyone whose benefits are reduced would consider the construction of his area's market basket as arbitrary and unfair.

Preparing an index providing sufficient geographic detail would entail collecting and analyzing comprehensive consumption and price data. Estimating the exact cost would be difficult without knowing how many areas would have their own index. A recent Department of Health, Education, and Welfare report stated that the cost of developing an adequate index could exceed \$50 million (10). When geographic cost of living differentials were being considered for the 1971 Family Assistance Plan, the BLS estimated that a limited "system of comparative price indices could not be fully implemented in less than 5 years" (10).

A 1974 article estimated that it would cost \$40 million and take 8 years for the BLS to change the market basket used in calculating the Consumer Price Index (CPI) and expand urban coverage from 56 to 85 areas (4, 16). The \$50 million estimate for developing urban and rural indices is not unreasonable, if it costs that much to revise and expand an existing program.

The price and consumption data that the BLS already collects are insufficient to produce a cost of living index to adjust welfare benefits. The BLS family budgets are prepared for only 44 urban areas and are not representative of the poor. The average cost of the low budget for a family consisting of a husband and wife and their two children was \$10,041 in 1976, but the poverty level for such a family was \$5,771 (7, 18). The CPI data are collected only in urban areas, and the market baskets priced also are not representative of the poor's purchasing patterns (4).

Delineating Areas

Delineating which areas should have their own price indices could present problems. A single aggregate index for a large area may not be representative of the prices in the small localities within the large area (10). Consequently, poor people living in a locality with prices less than the index indicates would receive a bonus, while people living in a locality with prices greater than the index indicates would be penalized. Uniform benefits would penalize people in high-cost regions and give bonuses to people in low-cost regions. It is difficult to determine whether uniform or adjusted benefits result in the most inequities when the intraregional and inter-regional range in the index is unknown.

There is also a degree of arbitrariness in area delineation. No matter how the boundaries are drawn, people living on the edge of an area adjacent to an area with a higher index would believe their benefits to be too low because their costs are similar to those in the adjacent area (22).

Possible Inequities

The methodology used to calculate the index may also lead to inequities. An index that tries to capture differences in consumption patterns may perpetuate regional differences in consumption that are not particularly desirable. As an example, the BLS lower budget is higher in the Northeast than in the South because, in part, the northeastern market basket contains more of the expensive items than the southern market basket. For instance, the northeastern market basket contains more beef and butter and less pork and lard (14, 15). Adjusting benefits by an index based on BLS methodology could perpetuate the consumption of high-cost items in the Northeast and the consumption of low-cost items in the South.

This is not a problem if an individual is indeed equally satisfied with the southern and northeastern budgets, as assumed by the BLS. The differences in welfare recipients' adjusted benefits and resulting consumption would reflect differences in the cost of living in this case. However, there is no way to know empirically whether or not the two budgets really do yield the same satisfaction. If they do not, differences in the budgets may reflect differences in real incomes rather than differences in the cost of living. Using an index based on BLS methodology could result in southerners receiving fewer benefits than northerners, not because it costs less to live in the South but because southerners cannot afford the same goods as northerners (14).

Administering and Revising the Index

Administering a welfare program with geographically varying benefits would be more expensive than administering a program with uniform benefits. Geographically varying benefits lead to geographically varying break-even levels and eligibility limits (10). 9/ Benefit schedules, break-even levels, and eligibility limits for each area could be calculated centrally and sent to local administrative offices. 10/

A local index can become quickly outdated because prices may change rapidly. For instance, a fast-growing rural area near a city might experience rapid price increases (22). Using an unrevised index for the rural area would result in welfare benefits that do not reflect recent increases in local living costs. Frequent revisions would be necessary to avoid such situations and would add to the cost of adjusting benefits.

Political Problems

There also is a political argument against cost of living adjustments. Members of Congress from low-cost areas might try to stop the enactment of extensive cost of living adjustments in order to maintain their constituents' benefit levels. On the other hand, cost of living adjustments may appeal to some members of Congress from

9/ The break-even level in a welfare program is the amount of earnings at which the welfare recipient ceases to receive benefits (1).

10/ If benefits are adjusted for cost of living differentials, then poverty levels must also be adjusted. The number of poor persons is a major indicator of need for public assistance, and this need varies with the cost of living. Thus, the poverty levels in a low-cost area should be less than the poverty levels in a high-cost area. Using poverty levels that do not vary with the cost of living would underestimate the number of poor in high-cost areas and overestimate the number of poor in low-cost areas. Varying poverty levels could complicate counting the poor. The Census Bureau currently estimates the number of poor each year from data collected from a sample of households (18). If poverty levels vary, the Bureau's sample may have to be expanded to make sure that each area with its own index and poverty level is adequately represented.

areas with low wages and low living costs. Adjusted welfare benefits would provide fewer work disincentives in such areas than uniform benefits.

METHODOLOGY

Deciding whether or not to incorporate cost of living adjustments in welfare programs depends in part on whether the adjustments result in a more desirable distribution of benefits and participants. This section describes the model, hypothetical welfare programs, and index used to explore the effects of cost of living adjustments.

The Model

The Urban Institute's version of the Transfer Income Model (TRIM) was used to estimate the effects of adjusting welfare benefits for cost of living differences. TRIM, a computer simulation model of the U.S. tax and welfare system, can be used to compare the effects of different tax and welfare policies without having to put the policies into action (23).

To estimate the effects of adjusting welfare benefits for cost of living differences, two hypothetical welfare programs were simulated. One program provides uniform benefits, while the other provides adjusted benefits. Any differences in the results of the two simulations are due to the cost of living adjustments. TRIM used detailed economic and demographic data from the March 1976 Current Population Survey (CPS), the most current data available when the simulations were made (13). Each CPS sample family was assigned a weight reflecting the prevalence of that family type. This allowed TRIM to estimate total welfare benefits from a relatively small sample (23).

The March 1976 CPS data were adjusted to 1981 using projections from Data Resources Incorporated, a private research firm. Income from wages and salaries, self-employment, interest, dividends, and rent was adjusted to show 1981 conditions (13). A 5-percent unemployment rate was assumed for making the economic projections. Census Bureau population projection data were used to adjust the weights assigned to families in the 1976 CPS sample to reflect conditions expected in 1981 (23).

Finally, tax and welfare rules were applied to the updated data base to determine taxes, welfare benefits, and the number of families and individuals receiving benefits or paying taxes. ^{11/} TRIM benefits in this report included only Federal benefits and enough State supplementation to ensure that no recipient was worse off under a hypothetical program than under the current program. Any additional State supplementation was excluded (13). Administrative costs were also excluded.

Families were the unit of observation in the analysis. Unrelated individuals were included as one-person families. TRIM used the Community Services Administration's 1975 poverty levels ~~adjusted~~ to 1981 to calculate the number of people in ~~the~~ the number of children in a family, the sex and ~~the~~ (13).

TRIM used simplifying assumptions in order to simulate the complex relationships existing in the welfare and tax system. Some of the assumptions arose because the CPS did not contain data necessary to determine program eligibility. For example, to estimate the number of people eligible for SSI under the current welfare system, information about the blind and disabled was needed. Assumptions were made to estimate the required data because the CPS provided no information about disabilities (23). Another set of assumptions was necessary to provide the projections to update the data base. As a final example, TRIM did not attempt to calculate participation rates for people eligible for welfare; all eligibles were assumed to receive welfare (13).

TRIM cannot give a precise estimate of the impact of a policy because of these simplifying assumptions (23). TRIM, for instance, cannot be used to calculate the exact number of participants a specific program will have. However, the model can be used to determine the impact of changing program rules on the number of eligibles and amount of benefits. Thus, TRIM can be used to see if a proposed welfare system would provide substantially more benefits than the existing welfare system.

Hypothetical Programs

The simulation results of two hypothetical welfare programs were compared to analyze the effects of adjusting welfare benefits based on cost of living differences. The hypothetical programs, patterned after the Program for Better Jobs and Income (PBJI) proposed by President Carter in 1977, are designated program 1 and program 2. The simulations are identical except that benefits of program 2 are adjusted for geographic cost of living differentials. The current programs were also simulated for comparative purposes.

Programs 1 and 2, like PBJI, would eliminate AFDC, SSI, and Food Stamps (2, 20). Families that do not contain members who are expected to work and individuals who are not expected to work would receive a single cash benefit. A smaller cash benefit would be paid to augment the earnings of those expected to work. If the wage earner in a family with a child could not find a job after a 5-week search, the person would be eligible for a special public service job. If after 3 weeks the wage earner could not find a public service job, his or her family would be eligible for the same benefits as comparable families without any member expected to work (20).

The results of the simulations are for fiscal year 1981, or when the PBJI was proposed to be effective (20). Both simulations use the wages paid by the Comprehensive Employment and Training Act (CETA) jobs program as the wage for public sector jobs (table 1) rather than the minimum wage proposed in PBJI (13). PBJI would provide benefits equal to only 65 percent of the poverty level for families with no income. However, program 1 would provide cash benefits equal to 100 percent of the poverty level (table 2). ^{12/} The earned income reduction rate for programs 1 and 2 would be 65 percent, resulting in a break-even level of \$9,200 under program 1 for a family of four with a wage earner (13). Cash benefits for program 1 are multiplied by cost of living indices to derive benefits for program 2. Welfare programs are frequently criticized for not providing adequate benefits. Using high wages and benefits in programs 1 and 2 makes it possible to see how much a more adequate program would cost.

^{12/} The CETA wages in table 1 and benefits in table 2 are expressed in 1977 dollars. TRIM, for the analysis used here, adjusted the wages and cash benefits for the inflation expected to occur between 1977 and 1981. The adjustment was 6.3 percent in 1978, 6.5 percent in 1979, 6.4 percent in 1980, and 7.3 percent in 1981 (13).

Table 1--CETA average hourly wages, calendar year 1977 1/

Region	:	Metropolitan	:	Nonmetropolitan
	:			<u>Dollars</u>
Northeast 2/	:	3.75		3.50
North Central 3/	:	3.75		3.15
South 4/	:	3.75		3.20
West 5/	:	3.95		3.70
	:			

1/ CETA is the Comprehensive Employment and Training Act.

2/ Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

3/ Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

4/ Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

5/ Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Source: (13).

Cost of Living Index

An index based on housing values is used as a proxy for a cost of living index to adjust benefits under program 2 (table 3). The index is calculated by dividing each region-residence median value of housing by \$29,500, the median value for the United States. 13/ Benefit schedules are multiplied by the relevant index from table 3. For instance, the benefit schedule for the metropolitan parts of the Northeast is multiplied by 1.21, and the schedule for the nonmetropolitan South is multiplied by 0.71. Benefit schedules are not adjusted for farm-nonfarm residence.

Housing values were used to form the index because housing costs appear to vary substantially throughout the United States. The importance of variation in housing costs is reinforced by U.S. Department of Agriculture (USDA), State of Florida, and BLS studies. The USDA found substantial variation in U.S. housing costs and values by region and residence (17). Housing had a larger range than any other component in the price level index for Florida's counties (3). Finally, the housing cost index for the lower BLS budget ranged from 81 to 120 in the continental United States (7). This is larger than the variation in the index for the total budget, which ranged from 88 to 111.

There are inherent problems in using the housing value index to represent cost of living differences. Housing may account for a large share of the geographic variation in the cost of living, but it is only one item that consumers purchase. Geographic variations in the value of housing may not be indicative of variations in the cost of other items.

13/ Housing values are from the 1975 Annual Housing Survey (19). Respondents were asked to estimate how much their house and lot would sell for in 1975. Values presented in this section are only for one-family houses on less than a 10-acre lot without a commercial establishment. The value of farm dwellings is excluded.

Table 2--Benefit schedule for program 1

Family composition	Basic payments for persons--		
	Not expected to work or for which no job is available	Expected to work	Benefits if job refused
		Benefits during 8-week job search	
Two parents:			<u>Dollars</u>
Adult head	2,900	0	0
Other adult	1,700	1,700	1,700
Each child regardless of age; maximum of 7 people per family	900	900	900
Single parent (with youngest child aged 14 or over):			
Head of household	2,900	0	0
First child	1,700	1,700	1,700
Each additional child; maximum of 7 persons per family	900	900	900
Single parent (with youngest child under 14): <u>1/</u>			
Head of household	2,900	2,900	0
First child	1,700	1,700	1,700
Each additional child; maximum of 7 persons per family	900	900	900
Aged, blind, and disabled:			
Couple	5,800	<u>2/</u>	<u>2/</u>
Single individual	3,800	<u>2/</u>	<u>2/</u>
Childless couple:			
Each adult	1,700	1,700	0
Single people	1,700	1,700	0

1/ Heads of single-parent families with youngest child under 7 are not expected to work.

2/ The aged, blind, and disabled are not expected to work.

Source: Derived from (27).

Table 3--Median housing value and housing value index, 1975

Region	Metropolitan housing		Nonmetropolitan housing	
	Median value	Index	Median value	Index
	<u>Dollars</u>	<u>U.S. median equals 100</u>	<u>Dollars</u>	<u>U.S. median equals 100</u>
Northeast	35,700	121	30,500	103
North Central	30,200	102	22,500	76
South	28,100	95	20,900	71
West	35,800	121	26,400	89
Total	32,200	109	23,400	79

Source: (13).

It is questionable whether housing values are even an adequate indicator of overall housing costs. Variation in the median value of housing may be a reasonable indicator of the variation in prices perspective home buyers face, but the relationship between housing values and rent is not as clear. Median housing values may not be indicative of the costs the poor pay because the poor are more likely to rent than the nonpoor. An index used to adjust welfare benefits should show variations in the expenditures poor people make.

Housing value variations may be due to differences in the quality of housing rather than differences in basic, no-frills shelter costs. Nonmetropolitan housing tends to be of lower quality than metropolitan housing (8).

However, the housing index is consistent with the BLS budgets. The BLS budgets tend to be higher in metropolitan areas and lower in the nonmetropolitan urban areas and the South (7, 9). The housing indexes also have their lowest values in the South and in nonmetropolitan areas.

Other data were considered and rejected as proxies for a cost of living index. The BLS budgets and the CPI encompass only urban areas, and there are no budgets or indexes for rural areas (26). Geographic income variations cannot be used as proxies for cost of living variations. Income levels and living costs are not highly correlated (9). The BLS Consumer Expenditure Survey, which is conducted at 10- to 12-year intervals, may become rapidly outdated (5).

Any actual program that adjusts welfare benefits must use a carefully developed cost of living index. This report does not propose using housing values to adjust welfare benefits. However, the housing value index can be used as an approximate index for the simulations presented here. The questionable quality of the housing value index does not make the model's results useless. The results can still help answer such broad questions as:

- (1) Would cost of living adjustments have an effect on the distribution of benefits between metropolitan and nonmetropolitan areas?
- (2) Would cost of living adjustments greatly increase total benefits paid?

RESULTS

This section presents the results for 1981 from TRIM simulations of program 1, which has uniform benefits, and program 2, which has adjusted benefits. The effects of cost of living adjustments on total benefits, average benefits, and benefit distribution by residence, region, race, age, sex, and income can be determined by comparing the two simulations. ^{14/}

Total Benefits and Eligibles

Adjusting benefit levels for cost of living differentials instead of paying uniform benefits may have a minor effect on total benefits or the total number of eligible families and unrelated individuals. Program 1 would pay \$71.5 billion, or \$500 million more than program 2 (table 4). Both simulations, however, would provide substantially more benefits in 1981 than the current programs. The current system would pay \$33.5 billion in total benefits, less than half the benefits derived from programs 1 and 2.

Total benefits would be slightly less with program 2 than with program 1 because more people would experience lower benefits with cost of living differentials than would experience higher benefits. This occurs because approximately 6.2 million of the 11.9 million poor families live in areas with cost of living indexes of less than 100 (table 5).

Distribution of Benefits by Residence and Region

Cost of living differentials would have little effect on total benefits or eligibles, but they would affect the distribution of benefits and eligibles between

Table 4--Eligible families and benefits in cash and jobs, by program, 1981 ^{1/}

Program	Metropolitan families		Nonmetropolitan families		Total	
	Eligible families	Benefits	Eligible families	Benefits	Eligible families	Benefits
	Millions	Billion dollars	Millions	Billion dollars	Millions	Billion dollars
Current ^{2/}	7.5	22.7	5.3	10.8	12.9	33.5
Program 1	13.6	47.0	7.9	24.5	21.5	71.5
Program 2	14.1	52.0	7.4	18.9	21.5	71.0

^{1/} Items may not add to totals due to rounding.

^{2/} Includes SSI, AFDC, and Food Stamps.

Source: Special tabulations from the Urban Institute's Transfer Income Model (TRIM).

^{14/} The reader should remember that the housing value index is used as a proxy for the cost of living index. The simulation results show the effects of cost of living adjustments only if the housing value index is a reasonable approximation of the true cost of living index.

Table 5--Families below the poverty levels before taxes and welfare, 1981 1/

Region	Metropolitan families	Nonmetropolitan families	Total
<u>Thousands</u>			
Northeast	2,019	449	2,468
North Central	1,571	<u>2/</u> 1,104	2,675
South	<u>2/</u> 2,061	<u>2/</u> 2,443	4,504
West	1,665	<u>2/</u> 552	2,217
Total	7,316	4,548	11,864

1/ Welfare includes only SSI, AFDC, and Food Stamps.

2/ Families living in regional-residential areas with an index less than the U.S. average (see table 3).

Source: Special tabulations from the Urban Institute's Transfer Income Model (TRIM).

metropolitan and nonmetropolitan areas. Total metropolitan benefits would be \$47 billion under program 1 and \$52 billion under program 2 (table 4). Nonmetropolitan benefits would be \$24.5 billion with program 1 and only \$18.9 billion with program 2.

There would be 13.6 million metropolitan families and unrelated individuals eligible under program 1, but 14.1 million eligible under program 2. This metropolitan increase in those eligible would be offset by the decrease in nonmetropolitan eligibles from 7.9 million with program 1 to 7.4 million with program 2.

The shift in benefits from nonmetropolitan areas to metropolitan areas when cost of living adjustments are made can be explained by the residential patterns of the poor (table 5). Most of the nonmetropolitan poor live in areas with a cost of living index less than the U.S. average. Thus, the nonmetropolitan poor as a group would receive fewer benefits from program 1 than from program 2. Because most of the metropolitan poor live in areas with a cost of living greater than the national average, they would receive more benefits from program 2 than from program 1. The South would experience the largest decreases from cost of living adjustments because it has the lowest metropolitan and nonmetropolitan indexes (table 3) and because it would have more poor than any other region.

Both programs are much more generous than programs that are likely to be enacted. A less generous program with a cost of living adjustment would still tend to pay fewer benefits as long as more poor people live in low-cost areas than in high-cost areas.

However, the poor in the low-cost nonmetropolitan and southern metropolitan areas have higher incomes from earnings and social insurance programs than the nonsouthern, metropolitan poor. 15/ Metropolitan poor outside the South would require relatively heavier subsidization to reach the target level of income in a less generous program paying uniform benefits. The money saved by adjusting benefits downward in low-cost

15/ The poverty gap for an individual poor family is the difference between the poverty threshold and the family's after tax income from earnings and social insurance programs, such as Social Security and Unemployment Compensation. Income in this case excludes receipts from welfare programs. The average poverty gap in 1981 would be \$3,200 per poor family in metropolitan areas outside the South but only \$2,700 in non-metropolitan areas and \$2,900 in southern metropolitan areas.

areas could be outweighed by the upward adjustment in high-cost areas if the nonmetropolitan and southern metropolitan poor's average incomes were very close to the lower target level and needed little subsidization.

Average Benefits

The average benefit level for all recipient families, including cash and jobs, would be \$3,330 in 1981 under the uniform benefits provided by program 1 and \$3,300 under the adjusted benefits provided by program 2 (table 6). Thus, cost of living adjustments in program 2 would have little effect on the U.S. average benefit level.

Cost of living adjustments would increase benefits in metropolitan areas and decrease average benefits in nonmetropolitan areas. The average program 1 metropolitan benefit would be \$3,450, and the average nonmetropolitan benefit would be \$3,110 in 1981. The gap between metropolitan and nonmetropolitan benefits would widen under program 2. Average metropolitan benefits would increase to \$3,690, while the average nonmetropolitan benefits would decrease to \$2,550. Both simulated programs, however, would provide more benefits to nonmetropolitan areas than the current welfare system.

The perspective is slightly different if the average benefit data already discussed are expressed in terms of real purchasing power (table 7). Items in the nonmetropolitan column of table 7 were calculated by dividing each figure in the nonmetropolitan column of table 6 by 0.79, which is the U.S. nonmetropolitan index from table 3. A similar procedure was used to adjust the metropolitan average benefit data.

The average real benefit in nonmetropolitan areas would be about \$200 less than in metropolitan areas under the current welfare programs. The average nonmetropolitan real benefit would be much higher under program 1 than under the current program. Program 1 also would provide a substantially higher average real benefit to nonmetropolitan areas than to metropolitan areas. Program 2, with its cost of living adjustments, would provide a nonmetropolitan average real benefit higher than the current programs but less than program 1. Program 2 would also pay a slightly higher average benefit in metropolitan than in nonmetropolitan areas. 16/

Table 6--Average benefits per eligible family by program, 1981

Program	Average benefits			Total
	Metropolitan	Nonmetropolitan	:	
	:	:	Dollars	
Current	3,010		2.030	
Program 1	3,450			
Program 2	3,690			
	:			

Table 7--Average real benefits per eligible family by program, 1981

Program	Average real benefits		Nonmetropolitan minus metropolitan
	Nonmetropolitan	Metropolitan	
<u>Dollars</u>			
Current	2,570	2,760	-190
Program 1	3,940	3,170	770
Program 2	3,230	3,390	-160
:	:	:	:

Source: Special tabulations from the Urban Institute's Transfer Income Model (TRIM).

Adjusted benefits would not be as advantageous in real terms to nonmetropolitan areas as uniform benefits, even though adjusting welfare benefits for variations in the cost of living may be more equitable. Nonmetropolitan people, if they act in their own self-interest, should prefer uniform benefits over benefits adjusted for variations in the cost of living.

Benefits by Race and Sex

Distribution of benefits by sex and race for the United States as a whole would vary little between the two simulations (table 8). Male family heads would receive \$36.1 billion in benefits from program 2, which would be somewhat less than the \$36.7 billion they would receive from program 1. Benefits to female heads would be \$34.8 billion under both programs.

About 70.6 percent of program 1 benefits and 71.0 percent of program 2 benefits would go to whites. White family heads in both metropolitan and nonmetropolitan areas would receive a slightly larger portion of program 2 benefits. Metropolitan white family heads would receive 68.3 percent of program 2 metropolitan benefits and only 67 percent of program 1 benefits. Similarly, nonmetropolitan whites would receive 78.7 percent of program 2 benefits, but only 77.3 percent of program 1 benefits. Residential patterns explain why whites would receive a slightly larger portion of the benefits under program 2 than under program 1.

The nonwhite, nonmetropolitan population is heavily concentrated in the South, which has the lowest nonmetropolitan cost of living index.^{17/} Most nonmetropolitan nonwhites, therefore, would receive fewer benefits from program 2. The downward cost of living adjustment for nonmetropolitan whites is smaller because a larger portion of the whites live outside the South and have higher cost of living indexes.

The nonwhite, metropolitan population is more heavily concentrated in southern cities than the metropolitan, white population. Metropolitan nonwhites would also receive a smaller portion of program 2 benefits because the South has the lowest metropolitan cost of living index.

Both male and female metropolitan family heads would receive more benefits from program 2 than from program 1. Male heads would receive about \$2.7 billion more, and

^{17/} The nonwhite category includes blacks, American Indians, Japanese, Chinese, and other people who are not white.

Table 8--Benefits by residence and sex of family head and percentage of benefits going to white family heads under programs 1 and 2, 1981 1/

Program and sex of family head	Metropolitan		Nonmetropolitan		Total	
	Benefits	Percentage to whites	Benefits	Percentage to whites	Benefits	Percentage to whites
	Billion dollars	Percent	Billion dollars	Percent	Billion dollars	Percent
Program 1:	47.0	67.0	24.5	77.3	71.5	70.6
Male	22.3	74.9	14.4	81.6	36.7	77.6
Female	24.7	59.9	10.1	71.1	34.8	63.1
:						
Program 2:	52.0	68.3	18.9	78.7	71.0	71.0
Male	25.0	75.7	11.2	82.9	36.1	78.0
Female	27.1	61.4	7.7	72.6	34.8	63.9
:						

1/ Items may not add to totals due to rounding.

Source: Special tabulations from the Urban Institute's Transfer Income Model (TRIM).

female heads would receive about \$2.4 billion more under program 2. However, benefits would decrease by \$3.2 billion for nonmetropolitan male heads and \$2.4 billion for nonmetropolitan female heads under program 2.

The cost of living adjustments in program 2 would have a small effect on the distribution of benefits by race and sex. The share of benefits going to whites would be slightly higher under program 2. Nationally, male heads would receive slightly less under program 2 than under program 1. The largest difference between the two programs would be the shifts in benefits from the nonmetropolitan to the metropolitan poor under program 2.

Benefits to the Elderly

Providing adjusted benefits rather than uniform benefits would result in fewer benefits for the elderly poor in nonmetropolitan areas. Total benefits for families with an elderly head would be \$17.4 billion under program 1 and \$16.4 billion under program 2 (table 9). However, the metropolitan elderly would receive more benefits from program 2, while the nonmetropolitan elderly would receive less. Total benefits for the metropolitan elderly would increase from \$9.4 billion under program 1 to \$11.3 billion under program 2. This increase would be more than offset by the \$2.9 billion decrease in nonmetropolitan benefits from \$8 billion to \$5.1 billion, with nonmetropolitan families headed by elderly males experiencing the largest decreases.

CONCLUSIONS

Geographic cost of living adjustments to Federal benefit levels may be more desirable than uniform benefits from an adequacy and equity point of view. Geographic adjustments would help ensure an adequate standard of living to people living in high-cost areas and provide families in similar circumstances throughout the United States with similar real purchasing power.

Table 9--Benefits under programs 1 and 2 going to families with a head at least 65 years old, 1981

Program and sex of family head	Benefits			Total	
	Metropolitan	Nonmetropolitan	Billion dollars		
Program 1:	9.4	8.0	17.4		
Male	4.0	4.1	8.1		
Female	5.4	3.9	9.3		
Program 2:	11.3	5.1	16.4		
Male	4.9	2.5	7.4		
Female	6.4	2.6	9.0		

Source: Special tabulations from the Urban Institute's Transfer Income Model (TRIM).

Cost of living adjustments would affect the distribution of benefits. Areas with a low cost of living index would receive smaller benefits if cost of living adjustments were made. Southern and nonmetropolitan areas, in particular, would receive smaller benefits relative to metropolitan areas outside the South. The South would experience the largest benefit reduction from cost of living adjustments because the South has the lowest metropolitan and nonmetropolitan indexes in addition to having more poor than any other region.

The simulations indicate that approximately 50 percent of the U.S. poor families would live in low-cost areas in 1981 and experience decreases in benefits from cost of living adjustments. These reductions would be fair because it costs less to live in low-cost areas. However, people living in nonmetropolitan areas or in southern metropolitan areas may prefer uniform benefits despite the equity of cost of living adjustments. Uniform benefits would provide greater real purchasing power to areas with low cost of living indexes.

The estimated cost of developing an index, which would still need periodic revision, is \$50 million. Varying benefits would also increase administrative costs. However, development, revision, and administrative costs could be at least partially offset by the modest benefit reductions resulting from cost of living adjustments.

Cost of living adjustments in the simulations actually reduced the total amount of benefits paid because benefit decreases in low-cost areas outweighed benefit increases in high-cost areas. However, cost of living adjustments may not reduce total benefits under all circumstances. Variation in housing values was used as a proxy for a cost of living index. Using an actual cost of living index that differs substantially from the housing index could yield different results.

Also, the simulations provided a higher level of benefits than is likely under any actual program. Cost of living adjustments might increase the total benefits paid in a less generous program because the poor in low-cost areas have higher incomes before welfare than the poor in high-cost areas. If low-cost area poor have incomes very close to the program's target level, relatively fewer benefits would be paid to them. The money saved by adjusting the small amount of benefits downward in low-cost areas could be outweighed by upward adjustments in high-cost areas.

LITERATURE CITED

(1) Barth, Michael C., George J. Cargagno, and John L. Palmer
Toward an Effective Income Support System: Problems, Prospects, and Choices.
Madison, Wis.: Institute for Research on Poverty, Univ. of Wis., 1974.

(2) Carlin, Thomas A., and Linda M. Ghelfi
"Impact of Welfare Reform on Rural Areas," Agricultural Finance Review, Vol. 38,
U.S. Dept. Agr., Econ. Res. Serv., May 1978.

(3) Cooper, Gary D.
"Spatial Indices: The Florida Experience," The Review of Regional Studies,
Vol. 6, no. 2, fall 1976.

(4) King, Jill
The Consumer Price Index. Measure of Poverty, Tech. Pap. V. U.S. Dept. Health,
Educ., Welfare, Oct. 28, 1976.

(5) The 1972-73 Consumer Expenditure Survey. Measure of Poverty, Tech. Pap. VIII.
U.S. Dept. Health, Educ., Welfare, not dated.

(6) Lurie, Irene
"Rationales for Interstate Differentials in Assistance Benefits and for State
Supplementation," Integrating Income Maintenance Programs. New York, N.Y.:
Academic Press, 1975.

(7) McCraw, Louise
"Family Budgets," Monthly Labor Review, Vol. 100, no. 7, U.S. Dept. Labor, Bur.
Labor Stat., July 1977.

(8) Mikesell, James J.
Population Change and Metro - Nonmetro Housing Quality Differences, AER-388.
U.S. Dept. Agr., Econ. Res. Serv., Oct. 1977.

(9) McNeil, Jack
Relative Poverty. Measure of Poverty, Tech. Pap. XIII. U.S. Dept. Health,
Educ., Welfare, Nov. 18, 1976.

(10) Peskin, Janice
Geographic Payment Variation in a Federal Welfare System. Tech. Anal. Pap. No.
14. U.S. Dept. Health, Educ., Welfare, Off. Income Security Policy, Jan. 1977.

(11) Philips, Louis
Applied Consumption Analysis. Amsterdam, Netherlands: North Holland Publ. Co.,
1974.

(12) Platky, Leon D.
"Aid to Families with Dependent Children: An Overview, October 1977," Social
Security Bulletin, Vol. 40, no. 10, U.S. Dept. Health, Educ., Welfare, Soc. Sec.
Admin., Oct. 1977.

(13) Pryor, Shirley A.
Selected Assumptions of the Transfer Income Model. Preliminary Draft, U.S.
Dept. Agr., Econ. Dev. Div.

(14) Sherwood, Mark K.
Bureau of Labor Statistics Family Budgets Program. Measure of Poverty, Tech. Pap. IV. U.S. Dept. Health, Educ., Welfare, Jan. 15, 1977.

(15) _____, "Family Budgets and Geographic Differences in Price Levels," Monthly Labor Review, Vol. 98, no. 4, U.S. Dept. Labor., Bur. Labor Stat., Apr. 1975.

(16) Shiskin, Julius
 "Updating the Consumer Index - an Overview," Monthly Labor Review, Vol. 97, no. 7, U.S. Dept. Labor, Bur. Labor Stat., July 1974.

(17) U.S. Department of Agriculture
Analytical Support for Cost-Of-Living Differentials in the Poverty Threshold. Measure of Poverty, Tech. Pap. XV. Prepared by the Econ. Res. Serv. for the U.S. Dept. Health, Educ., Welfare, Oct. 1976.

(18) U.S. Department of Commerce
 "Characteristics of the Population Below the Poverty Level: 1976," Current Population Reports, Series P-60, no. 115, Bur. of the Census, July 1978.

(19) _____, and U.S. Department of Housing and Urban Development
 "General Housing Characteristics," Annual Housing Survey: 1975, Series H-150-75A, Apr. 1977.

(20) U.S. Congress
The Administration's Welfare Reform Proposal: An Analysis of Better Jobs and Income. Budget Issue Paper for Fiscal Year 1979, Congressional Budget Office, Apr. 1978.

(21) _____, Handbook of Public Transfer Programs: 1975. Studies in public welfare, Joint Economic Committee, Subcommittee on Fiscal Policy, Dec. 31, 1974.

(22) _____, Income Security for Americans: Recommendations of the Public Welfare Study. Joint Economic Committee, Subcommittee on Fiscal Policy, Dec. 5, 1974.

(23) U.S. General Accounting Office
An Evaluation of the Use of the Transfer Income Model--TRIM--to Analyze Welfare Programs, Rpt. no. PAD-78-14. Nov. 25, 1977.

(24) U.S. General Services Administration
Federal Register, Vol. 43, National Archives and Records Service, Oct. 17, 1978.

(25) U.S. Department of Health, Education, and Welfare
 "Current Operation Statistics," Social Security Bulletin, Vol. 41, no. 4, Social Security Administration, Apr. 1978.

(26) _____, The Measure of Poverty. A report to Congress, Apr. 1976.

(27) _____, "Welfare Reform," HEW News. Aug. 1979.

